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ABSTRACT

The Office of Research and Planning at Nova Southeastern University had previously estimated that Nova Southeastern University had nearly a $218 million economic impact on South Florida during fiscal year 1994. This study replicated the methods used for the prior estimate to update the economic impact estimate for fiscal year 2000 (07/01/99 to 06/30/00). To offer context to the need for this update, it is useful to note that income grew by 89% from fiscal year 1994 to fiscal year 2000, and expenses grew by 86% from fiscal year 1994 to fiscal year 2000. Based on study methodology and the subsequent use of a conservative multiplier (2.00) for South Florida and an equally conservative multiplier (2.60) for Florida, it has been determined that Nova Southeastern University provided a $464.8 million impact on the South Florida economy during fiscal year 2000, and the University provided a $731.1 million impact on Florida's economy during fiscal year 2000. This finding represents a 114% increase in economic impact on South Florida's economy from fiscal year 1994 to fiscal year 2000. Future iterations of this methodology should attempt to find additional sources of data that would further document the University's importance to the region. (Contains 5 tables and 94 references.) (SLD)

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AN ESTIMATE OF NOVA SOUTHEASTERN UNIVERSITY'S ECONOMIC IMPACT ON SOUTH FLORIDA AND FLORIDA FOR FISCAL YEAR 2000 (07/01/99 TO 06/30/00)

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Nova Southeastern University
Research and Planning

Report 01-08

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AN ESTIMATE OF NOVA SOUTHEASTERN UNIVERSITY'S ECONOMIC IMPACT ON SOUTH FLORIDA AND FLORIDA FOR FISCAL YEAR 2000 (07/01/99 TO 06/30/00)

Thomas W. MacFarland **Senior Research Associate**
Report 01-08 **May 2001**

EXECUTIVE SUMMARY

Nova Southeastern University had a Fall Term 2000 enrollment of 18,587 students and a Calendar Year 2000 (01/01/2000 to 12/31/2000) enrollment of 25,796 students. The University is among the 20 largest independent, not-for-profit, post-secondary institutions in the United States and it currently has a Carnegie classification of *Doctoral/Research University - Intensive*.

With such a large student population and concomitant employee base, it is hardly surprising that Nova Southeastern University is included among Broward County's major employers. Because of the size of this economic base and the importance of the University to South Florida and Florida, the Office of Research and Planning previously estimated that Nova Southeastern University had nearly a $218 million economic impact on South Florida during Fiscal Year 1994.

The purpose of this study was to replicate methods used for this prior estimate, updating the economic impact estimate for Fiscal Year 2000 (07/01/99 to 06/30/00). To offer context to the need for this update, it is useful to note that: enrollment grew by 29 percent from Fall Term 1994 to Fall Term 2000, income grew by 89 percent from Fiscal Year 1994 to Fiscal Year 2000, and expenses grew by 86 percent from Fiscal Year 1994 to Fiscal Year 2000.

Based on the methodology used in this study and the subsequent use of a conservative multiplier (2.00) for South Florida and an equally conservative multiplier (2.60) for Florida, it has been determined that Nova Southeastern University provided a $464.8 million impact on the South Florida economy during Fiscal Year 2000 and the University provided a $731.1 million impact on Florida's economy during Fiscal Year 2000.

This finding represents a 114 percent increase in economic impact on South Florida's economy from Fiscal Year 1994 to Fiscal Year 2000. Future iterations of this methodology should attempt to find additional sources of data that would further document the University's importance to the region.

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INTRODUCTION

Background

Nova Southeastern University (NSU) was chartered in 1964 and the University currently has a Carnegie classification of *Doctoral/Research University - Intensive* (*2001 Higher Education Directory*, 2001). The University's main campus is in Broward County, Florida. The University has additional campuses in Broward County and Miami-Dade County. In an effort to serve distance education students, the University maintains permanent facilities at Regional Student Service Centers throughout Florida (Miami, West Palm Beach, Orlando, Tampa, and Jacksonville) and in Nevada (Las Vegas).

The University's Fall Term 2000 enrollment reached 18,587 students (*Nova Southeastern University Fact Book 2001*, 2001) and the University is among the 20 largest independent, not-for-profit, post-secondary institutions in the United States (Memorandum from Tom MacFarland to John Losak; January 16, 2001). The enrollment for Calendar Year 2000 (01/01/2000 to 12/31/2000) was 25,796 students. Approximately 70 percent of all students attend classes in South Florida and approximately 81 percent of all students attend classes in Florida:

	Place of Class Attendance		Permanent Residence	
Geographic Area	N	%	N	%
Broward County	15,155	59	7,921	31
Miami-Dade County	2,189	8	4,326	17
Palm Beach County	640	2	1,455	6
South Florida Subtotal	17,984	70	13,702	53
Other Florida Counties	2,908	11	4,448	17
Florida	20,892	81	18,150	70
Non-Florida	4,904	19	7,646	30
Total	25,796		25,796	

Although the University is widely-known for its distance education programs, in terms of context for this report, it is important to consider the results of an *ad hoc* query of the most current University enrollment data set (Calendar Year 2000) and observe the large number of students who attended class in South Florida and Florida, but are not permanent residents of either South Florida or Florida. Specifically, although 70 percent of all students attend class in South Florida,

only 53 percent of all students are permanent residents of South Florida. This difference represents students who move to South Florida so that they can pursue degree programs that in many cases are campus-based.

Along with the University's large enrollment, the University currently has nearly 2,500 full-time employees (*Nova Southeastern University Fact Book 2001*, 2001). This employment base is augmented by contract workers and part-time faculty. Indeed, for Fall Term 1999 (the last reporting term for comprehensive analysis of part-time faculty), the University employed 873 part-time faculty (*An Analysis of Nova Southeastern University's Fall Term 1999 Faculty Matrix*, 2000).

Purpose of This Study

With such a large student population and employee base, it is hardly surprising that Nova Southeastern University is included among Broward County's major employers (*Broward's Economic Handbook: 2000-2001*, 2000). Because of the size of this economic base and the importance of the University to South Florida and Florida, the Office of Research and Planning previously estimated that Nova Southeastern University contributed over $217 million to South Florida and its economy during Fiscal Year 1994 (*The Impact of Nova Southeastern University on the South Florida Economy*, 1995).

Research and Planning also prepared a state-wide economic impact study for the Independent Colleges and Universities of Florida in 1996 (*The Impact of Independent Colleges and Universities of Florida on the State Economy: Fiscal Year 1994-95*; 1996). Based on the methodologies of these two reports, Research and Planning prepares an annual economic impact brief, using broad summaries prepared soon after end-of-year fiscal reports are prepared. These brief economic impact summaries, however, are not prepared with the level of detail and scrutiny used for this more comprehensive report.

The purpose of this study was to replicate the 1995 study, updating the economic impact estimate for Fiscal Year 2000 (07/01/99 to 06/30/00) using a full data set that would support detailed analyses. To offer context to the need for this update, it may be useful to list a few changes at the University over the last few years (*Nova Southeastern University Fact Book 1995*, 1995 and *Nova Southeastern University Fact Book 2001*, 2001) that impact this study:

1. The University's Fall Term 1994 enrollment was 14,368 students and by Fall Term 2000 enrollment grew to 18,587 students.

   This gain represented 29 percent increase in enrollment over 6 years or an approximate 5 percent annual growth rate in student enrollment.

2. The University's Fiscal Year 1994 income was approximately $143 million and by Fiscal Year 2000 income grew to approximately $270.

   This gain represented 89 percent increase in income over 6 years or an approximate 15 percent annual growth rate in income.

3. The University's Fiscal Year 1994 expenses was approximately $137 million and by Fiscal Year 2000 expenses grew to approximately $254.

   This gain represented 86 percent increase in expenses over 6 years or an approximate 14 percent annual growth rate in expenses.

Although Research and Planning provided annual estimates of the University's economic impact since the initial 1995 report, it was judged that sufficient time had passed (Posey, 1983) and the assumptions underlying those estimates needed to be examined, such that an update to this process would be a useful allocation of resources. This report should offer a more contemporary view of the University's contribution to the economy throughout South Florida and Florida.

Assumptions and Limitations

Although *The Impact of Nova Southeastern University on the South Florida Economy* (1995) was the University's first comprehensive attempt to estimate NSU's impact on the local economy, economic impact studies of various types have over a 30-year history in higher education. Caffrey and Isaacs (1971) and the work they conducted through sponsorship by the American Council on Education provided a set of assumptions and limitations for this area of research that has gained a wide-level of acceptance.

College or university expenditures that can be immediately traced are obviously included in the set of factors influencing local economies. Other economic areas that are often not immediately assumed include: the ability of a college or university to attract new businesses; benefits from college or university sponsored employee training and improvements to the local workforce; the ability of a college or university to attract and retain youth and limit their migration to other areas; business-use of students as an available part-time workforce (Stout, 1996); the unique introduction of money and special skills to a local community by foreign students (Gale, 1988); reduced crime rates, increased charitable giving, and improved ability to use technology (Institute for Higher Education Policy, 1998).

Of course, economic impact studies are also influenced by known (and unknown) limitations, often due to the difficulty of identifying data resources when tracking systems are not feasible. The National Association of State Universities and Land-Grant Colleges (1997) reported that member institutions provided a favorable $4 return-on-investment for every state tax dollar

invested. The University of Nebraska (1999) reported $9 state-wide business transactions for every $1 of state funds invested in the institution. However, to provide balance, it is useful to review additional literature, such as Stout (1997), who identified a series of limitations on the entire usefulness of economic impact studies.

Within the context of these issues, this report is influenced by the following set of assumptions and limitations about Nova Southeastern University and its impact on the South Florida economy and the broader Florida economy:

Assumptions

1. If Nova Southeastern University did not exist in Broward County, it is assumed that a similar institution would not have taken its place somewhere in the South Florida region. Accordingly, the economic impact of the University represents additional income and it does not represent money that is merely displaced by one institution for another institution. This issue of new money, and not displaced or redistributed money, is central to the methodology of an economic impact study (Darrow, 1999; Brown, 2001; Hudson, 2001).

2. The University has multiple campuses in Broward County and Miami-Dade County and regional student service centers in South Florida (Miami and West Palm Beach). Due to the mobility of South Florida residents along the north-south Florida Turnpike and Interstate 95 corridor, it is assumed that the economic impact of the University cannot be restricted to Broward County alone. It is therefore appropriate to view the local economic impact of Nova Southeastern University on adjoining counties also, including Broward County, Miami-Dade County, and Palm Beach County.

3. It is assumed that distance education students in NSU's field-based and online programs have a unique impact on the South Florida economy. They export tuition dollars to South Florida, while consuming very few local municipal services.

   It is further assumed that when distance education students (either alone, or often with family and friends) in NSU's field-based programs come to campus for institutes and cluster meetings, their spending is similar to the way tourists spend money: they stay in hotels, they rent cars and ride in taxies, and they eat meals in restaurants. These activities introduce unique student contributions to the South Florida economy.

4. Student spending traditionally impacts local economies (McCarthy, 2000) and it is assumed that the University contributes to the South Florida economy because of the temporary relocation to South Florida by non-resident students (Smith and Bissonnette, 1986) from other Florida regions and other states and countries. As a conservative estimate, it is assumed that students with a temporary South Florida residence spend approximately $13,400 per year for cost of living expenses. This money and its

subsequent multiplier effect would not enter the economy if the University did not exist in South Florida.

5. It is assumed that some permanent South Florida residents who also attend the University would leave either South Florida or Florida if the University and the specialized programs students seek did not exist in South Florida. In turn, their contributions to the local and state economy would also leave if the University did not exist in South Florida.

   During Fall Term 1999, Research and Planning administered a survey that was broadly representative of the entire student population. When presented with the question *What would you have done if you had not attended NSU?* nearly 10 percent of all respondents with permanent residence in South Florida indicated a willingness to leave South Florida and nearly 25 percent indicated a willingness to leave Florida, to attend other private or state colleges and universities. It is interesting to note that more than half of all survey respondents who attended class in South Florida and who were identified as permanent residents of South Florida and who indicated a willingness to leave either South Florida and/or Florida for another college or university were students in the Health Professions Division, which is largely campus-based. The Health Professions Division offers first-professional programs such as dentistry and pharmacy that are not otherwise available in South Florida and optometry which is not available elsewhere in Florida.

   The University's presence in South Florida retains these residents/students and the fiscal gain from their contribution to the local and state economy (approximately $13,400 annual cost of living expenses) should be included in any calculation of the University's economic impact.

Limitations

1. This report does not incorporate the more than $43 million NSU Library, Research and Information Technology Center which is currently under construction on the University's main campus, in Davie, Florida. The economic impact of this new 5-story, 300,000 square-foot facility and adjacent 1,525-space parking garage must be deferred until this study is replicated at a later date.

2. It is only possible to offer estimates of the dollar expenditures distance education students in the field-based and online programs make when they come to South Florida to attend classes at institute and cluster meetings. It is estimated that these students spend approximately $90 per room night for lodging. It is further assumed that there are two occupants in each room per room night and that each occupant spends $60 per day for food and all other local expenses. However, until special surveys are conducted it is only possible to offer the broadest estimates of this contribution and in this report these estimates are purposely conservative.

3. Until specific studies are conducted, it is only possible to offer a broad estimate of the amount of money visitors to Nova Southeastern University introduce into the South Florida economy. Although University-induced lodging and food contributions from these guests impact (Hogan, 1992; Hogan, 1999; Hopkins, 2001) the South Florida economy, this report is limited in that the University does not have an inclusive tracking system that would offer any sense of this contribution, other than reasonable estimates.

4. This report is limited in regard to retirement contributions by the University to TIAA-CREF for current employees or retirement payments by TIAA-CREF to former University employees who still reside in either South Florida or Florida. It is possible that these two sub-categories would contribute millions of dollars of economic impact on South Florida and Florida, but access to this type of data is so prohibitive that it is only prudent to mention that this source of economic impact exists, but is excluded from the current presentation.

5. This report does not include any dollar amount regarding the human capital contributions of University alumni.

   However, what are the long-term contributions of these students and alumni to the economy and culture? The National Longitudinal Study of the Class of 1972 was used to examine economic returns for the baccalaureate (Grubb, 1992; Grubb, 1995). The Bureau of the Census (<http://www.census.gov/hhes/income/histinc/incperdet.html>; accessed May 15, 2001) provides an extensive set of tables on the relationship between income and education and it has been estimated that a person with a Bachelor's degree will earn over a lifetime $1.5 million more than a high school graduate (*More Education Means Higher Career Earnings*, 1994):

   - What additional taxes to local municipalities and the state government do these students contribute, because of their increased earning potential after graduation from the University?

   - What other professional, social, and cultural contributions do these students provide after graduation from the University?

   The economic impact of these issues must be deferred until future iterations of this study are attempted.

6. Although this report provides exact statistics on salary expenditures, it is limited in that it does not include the dollar value brought into the economy from faculty consulting services and *pro bono* activities. Elliott, Levin, and Meisel (1988, p.21) addressed secondary incomes of faculty and staff and the impact of this income on an economy:

Surveys of faculty and staff can yield useful information about nonuniversity income from consulting and investment that accrues to the region only because the individual is employed by the local university or college. This response can be obtained as a percentage of the individual's university income which is available through administrative records. Thus, the surveys provide more accurate, complete, and detailed information than would be obtained from the Caffrey and Isaacs expenditure models.

Although future *ad hoc* surveys of faculty may be of some use regarding this source of economic impact, it is not reasonable to think that the University would ever develop a tracking mechanism for faculty secondary incomes and it is accordingly excluded from the calculation of University impact on the local and state economy.

7. Most educational institutions do not pay municipal property tax for land and buildings, in the same way that churches and other religious properties are tax-exempt. However, Morrell (1995, p. 43) clearly warned that "One of the most inviting targets for tax revenue expansion is colleges and universities."

Accordingly, this report is limited in that it does not include a negative calculation for lost tax revenue. It is currently not reasonable to think that Florida's legislative bodies would allow property tax to be placed against tax exempt institutions, like the University. However, this issue should be considered when viewing this report in its largest context.

METHODOLOGY

Selection of a Model

This report is based on the standard deterministic input-output economic impact model first presented by Caffrey and Isaacs (1971). This model has been widely accepted by the academic community as an appropriate means of determining a university's economic impact on a specific region. The use of this model (the full model is often modified to accommodate local constraints) for calculating local economic impact by a college or university has been so widely received that it has been used to determine the collective non-local and even state-wide economic impact of multiple institutions: Trubac (1975); Wellsfry (1976); Vermont State Commission on Higher Education (1979); Olson (1981); Packwood (1982); State University of New York (1982); California State Postsecondary Education Commission (1984); Johnson County Community College (1985); Kansas City Regional Council for Higher Education (1991); Weitzman (1991); Johnson (1994); State University of New York (1995); Corder (1997); Human

Capital Research Corporation (1997); May (1999); University of South Carolina (2000); Commission on Independent Colleges and Universities (2001).

Although this model is widely accepted, Caffrey and Isaacs (1971) is viewed by some as too narrow in focus and therefore too conservative in determining a university's economic impact on the local community. Ryan (1983), in a widely-referenced study, provided modifications to Caffrey and Isaacs (1971), using a methodology that is more manageable in terms of required data.

Bluestone (1993) offered a well-received report on the long-term economic impact of a university on a regional area, going far beyond the standard deterministic input-output presented by Caffrey and Isaacs (1971). Gana (1993) offered alternate methodologies and subsequent measures to standards proposed by Caffrey and Isaacs (1971). Stokes and Coomes (1996) provided an excellent treatment of the many issues that must be considered when determining an educational institution's impact on local economies.

Selection of a Multiplier

This study is based on the concept that an educational institution such as Nova Southeastern University can impact a local and state economy to a degree that far exceeds initial fiscal year income or payroll. This concept is based on the concepts of *multiplier effect* and *income leakage*, which are both found in this body of literature:

> Multiplier Effect: Taylor (1990, p. 40) offered an exceptionally lucid discussion of an economic multiplier and the impact of a multiplier on a local economy:
>
> > The method of estimating the total economic impact of [any university] is essentially an application of a multiplier model in which direct spending, that is money that flows into the area from other areas, is subsequently respent within the area by the initial recipients. The respending process continues in successive rounds, from each of which there are leakages into the 'external' economy until the amount respent is approximately zero. The ratio between the initial injection and the total spending is termed the value of the multiplier.
>
> Income Leakage: Goldstein (1989-90) defined income leakage as follows: "When inputs are purchased from businesses outside the region at any step, there is a 'leakage,' and no further indirect economic impact in the region occurs." (p. 53)

The concept of physical movement of money through a declared geographic region and the multiplication of this money, until the money eventually leaks out of the area, is graphically

displayed at *Where'$ George*™ (<http://www.wheresgeorge.com/>; accessed May 1, 2001), a Web resource devoted exclusively to this topic.

Many resources were reviewed to determine the most appropriate multipliers for this study: Caffrey and Isaacs (1971); Ryan (1983); Orlowski (1992); Simmons (1992); Bluestone (1993); Clark (1993); Conklin (1993); Head (1994); Stokes and Coomes (1996); Chatterton (1997); Jafri, Dudley, and Buland (2001).

For the South Florida community (the tri-county area of Broward County, Miami-Dade County, and Palm Beach County) a multiplier of 2.00 was selected for this study. To determine the University's impact through the entire Florida economy, a more inclusive multiplier of 2.60 was selected for this study. A rationale for these selections includes the following:

1. Moore (1975) provided a discussion of the multiplier effect and selected a conservative 1.9 multiplier for an economic impact study of a post-secondary institution on its local service area.

2. Salley (1976) used Caffrey and Isaacs (1971) as a theoretical basis and then developed economic multipliers that were appropriate for the specific metro area served by a post-secondary institution.

3. Posey (1983, p. 3) presented a summary of the range of multipliers used in previous economic impact studies, with multipliers ranging from 1.09 to 4.35.

4. Elliott, Levin, and Meisel (1988, p. 26) cautioned that "most multipliers reported are around 2, [and] caution should be applied to the use of any multiplier substantially in excess of 2."

5. Goldstein (1989-90, p. 53) reported that "the normal range of an output multiplier is between 1.5 and 3.0."

6. Leslie and Brinkman (1993, p. 91), in a very detailed review of prior economic impact studies, reported that "Of all 41 college-related expenditure multipliers identified in the integrative review, the mean expenditure multiplier was 1.8 (n = 41), and for jobs it was 2.5 (n = 29)."

Accordingly, it was judged that a 2.00 multiplier was an appropriate selection to estimate the University's impact on the South Florida economy. And, a 2.60 multiplier was judged appropriate for estimating the University's impact on the broader state-wide economy, especially since the University has a physical presence throughout Florida.

To offer some level of context to these selections in terms of the University's impact on the South Florida economy and the broader Florida economy, it should be noted that:

- Based on population, Florida is currently the 4th largest state in the United States (<http://www.census.gov/population/cen2000/phc-t2/tab01.txt>; accessed May 14, 2001) and Florida has a population of 15,982,378 million residents (*United States Census 2000*, 2001).

- The South Florida economy is driven by a permanent population of approximately 5 million residents:

▫ Broward County	1,623,018	permanent residents
▫ Miami-Dade County .	2,253,362	permanent residents
▫ Palm Beach County ..	1,131,184	permanent residents
TOTAL	5,007,564	permanent residents

- Unlike other economic impact studies that examine regional or even state-wide income leakage away from a specific campus-based college or university, Nova Southeastern University's distance education offerings at regional student service centers in Florida (Miami, West Palm Beach, Orlando, Tampa, and Jacksonville) and site-based cluster meeting locations throughout Florida greatly expand the University's opportunities to spend money and in turn impact the local and state economy.

Sources of Data

Measured Contributions

Nova Southeastern University maintains a comprehensive accounting and payroll system that made it possible to readily obtain available economic data from *ad hoc* queries to the appropriate databases. As presented in Table 1 and Tables 2.A to 2.C:

- Data related to salary expenditures were provided by the Office of Human Resources and Payroll.

- Data related to non-salary expenditures were provided by the Office of Information Technology.

- Data related to contract services were provided by the Office of Information Technology. When examining this listing in terms of formal identification *by state* and *by zip code*, it was originally observed that this category represented

money sent to an out-of-Florida contract services management company. The money actually describes wages paid to campus-based contract employees and, as such, it is assumed that most money in this category is spent in South Florida, which of course also represents money spent in Florida.

For the analysis of measured contributions to the local and state economy, it is important to note that data were organized *by state* and *by zip code*, which facilitated breakout analyses for South Florida (Broward County, Miami-Dade County, and Palm Beach County) and Florida. Zip codes, as a data resource, have been used in other economic impact studies, including work by James Madison University (1996).

Estimated Contributions

Annual cost of living expenses (approximately $13,400) and the contribution of this money to the South Florida and Florida economy were estimated for two separate groups of students:

- *Zip code* and *State* identifiers from existing data sets were used to identify students who attend class in South Florida, but have an out-of-area permanent residence (N = 4,282 students). These students have a temporary residence in South Florida and their annual cost of living expenditures represent new money introduced into the South Florida economy.

- The results of a Fall Term 1999 survey of students from all academic centers were used to estimate the number of students with permanent residence in South Florida and who attend classes at the University in South Florida, but would leave the area if it were not for the University's presence in South Florida. In terms of economic impact, these students are treated as if they are out-of-area students, because prior survey responses to the query *What would you have done if you had not attended NSU?* resulted in the following observations:

  - Approximately 9 percent of all South Florida residents who responded to this question indicated that they would leave South Florida, but not Florida.

  - Approximately 22 percent of all South Florida residents who responded to this question indicated that they would leave Florida.

  More than half of these respondents were students in the Health Professions Division, which is largely campus-based. Clearly, the University's presence in South Florida retains these local residents/students and the annual cost of living expenditures by these students should be included in any calculation of the University's impact on the local and state economy.

An estimate was also made of expenses for students, guests, and others for lodging in South Florida hotels. This contribution (full details are included with Table 1) is based on an estimated use of 33,573 room nights in local hotels for CY 2000, at $90 per room night. (For additional context to the importance of room nights on the hospitality industry, Weil (2001) summarized a set of South Florida activities and the estimated number of room nights for each activity). It is further assumed that there are two occupants in each room per room night and that each occupant spends $60 per day for food and all other local expenses. This estimate views students and guests as if they are tourists, which is appropriate in terms of lodging and food expenses.

RESULTS

This study was conducted to offer an estimate of Nova Southeastern University's impact on the South Florida economy and on Florida's economy. Statistics about the University's Fiscal Year 2000 economic impact are summarized in Table 1 and salary and non-salary breakout statistics provided in Tables 2.A to 2.C.

Based on the methodology used in this study and the subsequent use of a conservative local multiplier (2.00) and an equally conservative state-wide multiplier (2.60), it has been determined that:

Economic Impact Throughout South Florida

- Nova Southeastern University provided a $464.8 million impact on the South Florida economy during Fiscal Year 2000.
- Nova Southeastern University, and the spin-off effect of economic activity generated because of the University, was indirectly responsible for more than 20,900 secondary jobs throughout South Florida during Fiscal Year 2000.

Economic Impact Throughout Florida

- Nova Southeastern University provided a $731.1 million impact on Florida's economy during Fiscal Year 2000.
- Nova Southeastern University, and the spin-off effect of economic activity generated because of the University, was indirectly responsible for more than 25,300 secondary jobs throughout Florida during Fiscal Year 2000.

SUMMARY

It is estimated that Nova Southeastern University and its faculty, staff, students, and guests contributed nearly $465 million to the South Florida economy in Fiscal Year 2000 and $731 million to Florida's economy during Fiscal Year 2000. The University was also indirectly responsible for the creation of thousands of secondary jobs throughout South Florida (nearly 21,000 secondary jobs) and Florida (more than 25,000 secondary jobs). This study was based on the use of both measured data and estimates that are considered conservative, when data for exact expenditures were unavailable.

This study did not incorporate the negative impact of lost taxes because of the University's tax-exempt status (Selgas, 1973; Palmer, 1978; Morrell, 1995; Weiss, 1999) and it did not include the cost of public schools and municipal services for University affiliates and their families (Breslin, 1979; Bess, 1980). This study did not capture the underestimation of the economic impact of a college or university (Lillibridge, 1995) due to the positive impact to local communities from the creation of retirement-based wealth (Lewis, 1996), growth in human capital (Sturm, 1996; Sanchez and Laanan, 1998), and spending for University-sponsored sports and cultural events (Buchanan, 1994) that attracted new money into South Florida and Florida.

When considering this level of economic impact, it is important to once again recall that the University has a major bearing on higher education in South Florida and Florida. Indeed, based on Fall Term enrollment statistics, the University is the largest independent college or university in Florida and it is counted among the 20 largest independent, not-for-profit, post-secondary institutions in the United States.

Further, unlike most campus-centric institutions, Nova Southeastern University has a real brick-and-mortar physical presence throughout South Florida and Florida. This physical presence and the money spent at these many locations for salaries, office space rentals, electricity and other utilities, etc. has an immediate and long-term economic impact that only multiplies as money is spent and respent.

Along with this highly visible estimate of economic impact, it is also useful to understand how an economic impact study can be used as a demonstration of institutional effectiveness (Rubi, 1995; Rajek, 1997) and the concept of a University's impact on community economics and human capital.

The University has many hidden impacts on the local and state economy that do not appear in this study and subsequent recommendations follow:

1. Currently, short-term retirement contributions that leave the area are not balanced against long-term retirement income that comes back to the area. The Office of Research and Planning currently has no sense of the number and magnitude of

University retirees who maintain a residence in either Florida or South Florida and it would be a challenge to obtain an estimate of this group.

Even so, retirement contributions must surely be a major source of revenue to the local and state economy and it should be considered in future examinations of the University's economic impact. Special surveys of former University employees may have some level of usefulness, but direct queries to TIAA-CREF, if this information could be collapsed into broad groups, would be more useful in an attempt to gain some perspective on this source of income. Moore and Amey (1993) identified a set of faculty-related policies that impact higher education and, while retirement is only one of many factors in this listing, it now seems appropriate for the University to gain a sense of its former employees and their continued contributions to the profession and the local and state economy.

2. There is no reference in this study to the current income from alumni who reside in either Florida or South Florida and the influence of higher salaries on local and state-wide economies. There is a case that this increased income should be attributed to the University (Linthicum, 1978) and it is reasonable to think that this is a major source of revenue to the local and state economy.

   Research and Planning, in collaboration with Institutional Advancement and Alumni Relations, should be able to develop a survey instrument that would offer a sense of the University's alumni and their contributions to the South Florida and greater Florida economy.

   The Florida Education and Training Placement Information Program (FETPIP) (<http://www2.myflorida.com/awi/pdg/quickquestions/fetpip/whatis.htm>; accessed May 16, 2001) should also be able to offer a sense of Florida-based University graduates and their income levels.

   The ability of a college or university to attract and retain quality students who later increase the skill base of a specific area was carefully examined by Brown and Heaney (1997) and it is essential for the University to have a better sense of its graduates and their economic, cultural, and social contributions to South Florida and the more inclusive set of all Florida communities.

3. The University does not have a comprehensive tracking system that monitors all planned and *ad hoc* University-sponsored events that generate increased visitor-days (Hill, 1999) to the South Florida hospitality industry . Although this report offered an estimate of the money generated by these events at local hotels and restaurants and the impact on the local economy as visiting distance education students, parents and friends, and guests spend money, this estimate was based on a set of conservative assumptions.

The University will never be able to track every individual who visits the local area because of the University's presence in South Florida. However, for future iterations of this report, Research and Planning, in collaboration with academic centers and appropriate administrative departments, should be able to offer a more inclusive estimate of this activity and its subsequent impact on the South Florida economy.

This report provided evidence that Nova Southeastern University had a $464.8 million impact on the South Florida economy during Fiscal Year 2000 and a $731.1 million impact on Florida's economy during Fiscal Year 2000. It is likely that this estimate is conservative, due to the selected multipliers and the exclusion of data that could not be substantiated.

Although the University is chartered as a not-for-profit institution, that classification does not mean that the University does not impact the economy and subsequent profits in its service area and beyond. The University of Pennsylvania, which like Nova Southeastern University is also among the 20 largest independent, not-for-profit, post-secondary institutions in the United States, clearly saw its role as an impetus for economic growth and stated that "Penn's 'not-for-profit' status belies its striking contributions as an engine of growth for Commonwealth jobs and businesses" (Rodin and Fry; p. 5, 1999). Van Meter (1995), Goldberg (1999), Guilford (1999), and Link (2000) all cited similar examples of how contemporary institutions of higher education fuel local and broader economies. Flanigan (2000, p. 3) compared today's role for higher education to the prior role of manufacturing and noted that "In other times, heavy-manufacturing plants provided the multiplier effects of jobs and economic development. Today knowledge and centers of knowledge [ ] provide those multipliers."

Future iterations of this reporting process should attempt to focus on additional sources of information, as the University continues to estimate its impact on the South Florida economy and broader Florida economy. If it were possible to document all University contributions to the economy, it is conceivable that the University's estimated $731 million economic impact would possibly reach a $1 billion annual impact on Florida's economy.

REFERENCES

2001 Higher Education Directory. (2001). Fall Church, Virginia: Higher Education Publications, Inc.

An Analysis of Nova Southeastern University's Fall Term 1999 Faculty Matrix. (2000). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 00-21.

Bess, Raymond. (1980). *A Study of the Economic Impact of Six Community Colleges in Illinois*. ERIC ED 191516.

Bluestone, Barry. (1993). *UMASS/Boston: An Economic Impact Analysis*. ERIC ED 356733.

Breslin, Thomas P. (1979). *The Economic Impact of Trenton State College on the Local Community, Fiscal 1978*. ERIC ED 185911.

Broward's Economic Handbook: 2000-2001. (2000). Fort Lauderdale, Florida: The Broward Alliance.

Brown, Joseph H. (2001). "Some Things You Just Accept on Faith." *Tampa Tribune*; p. 6.

Brown, Kenneth H., and Michael T. Heaney. (April 1997). "A Note on Measuring the Economic Impact of Institutions of Higher Education." *Research in Higher Education*, V38, N2; pp. 229-40. ERIC EJ 547576.

Buchanan, Debra. (1994). *The Economic Impact of Mississippi Valley State University on the Local Economy, 1992-93*. ERIC ED 384280.

Bureau of the Census. (August 1994). *More Education Means Higher Career Earnings*. Statistical Brief 94-17. ERIC ED 388706.

Caffrey, John, and Herbert H. Isaacs. (1971). *Estimating the Impact of a College or University on the Local Economy*. ERIC ED 252100.

California State Postsecondary Education Commission. (1984). *The Wealth of Knowledge. Higher Education's Impact on California*. ERIC ED 247833.

Chatterton, Paul. *The Economic Impact of the University of Bristol on its Region*. URL <http://www.bris.ac.uk/Publications/Chatter/impact.htm> accessed April 11, 2001.

Clark, Mary Jo. (1993). *The Economic Impact of San Juan College on San Juan County, New Mexico, 1991-92*. ERIC ED 354035.

Commission on Independent Colleges and Universities. (February 2000). *New Age: New Partnerships*. URL <http://www.cicu.org> accessed May 17, 2001.

Conklin, D. David. (1993). *The Economic Impact of Dutchess Community College*. ERIC ED 363372.

Corder, David R. (November 21, 1997). "Private Colleges Unite for Economic Benefit." *Business Journal of Jacksonville*. URL <http://jacksonville.bcentral.com/> accessed April 17, 2001.

Darrow, Dennis. (June 1, 1999). "Study Measures University of Southern Colorado's Economic Impact." *The Pueblo Chieftain*. General BusinessFile ASAP full text electronic copy accessed March 9, 2001.

Elliott, Donald S., Stanford L. Levin, and John B. Meisel. (1988). "Measuring the Economic Impact of Institutions of Higher Education." *Research in Higher Education*, V28, N1; pp. 17-33. ERIC EJ 376459.

Fall Term 1999 Nova Southeastern University Students Respond to a Broad-Based Satisfaction Survey. (2000). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 00-09.

Fall Term 1999 Nova Southeastern University Students Respond to a Broad-Based Satisfaction Survey: Breakouts by Student Service Center Locations. (2000). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 00-26.

Fall Term 1999 Nova Southeastern University Students Respond to a Broad-Based Satisfaction Survey: A Comparison of Campus-Based Students And Distance Education Students. (2001). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 01-03.

Fall Term 1999 Nova Southeastern University Students Respond to a Broad-Based Satisfaction Survey: A Comparison of Students by Age (≤ 25 Years and ≥ 26 Years). (2001). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 01-06.

Flanigan, James. (April 12, 2000). "UCR: Inland Empire Builder; School Helps Transform the Region as it Conducts Research, Assists Start-Ups and Trains Lawyers, Educators and Managers for a New Economy." *The Los Angeles Times*, p. C1.

Gale, James R. (1988). *Foreign Students in a Regional Economy: A Method of Analysis and an Application*. ERIC ED 331404.

Gana, Rajaram. (1993). *Econometric Estimation of the Economic Impact of a University.* ERIC ED 360914.

Goldberg, Carey. (October 8, 1999). "Across the U.S., Universities are Fueling High-Tech Economic Booms." *The New York Times*, p. 12.

Goldstein, Harvey A. (1989-90). "Estimating the Regional Economic Impact of Universities: An Application of Input-Output Analysis." *Planning for Higher Education*, V18, N1; pp. 51-64. ERIC EJ 400963.

Grubb, W. Norton. (Winter 1992). "The Economic Returns to Baccalaureate Degrees: New Evidence from the Class of 1972." *Review of Higher Education*; V15, N2; pp. 213-31. ERIC EJ 444629.

Grubb, W. Norton. (Summer 1995). "The Economic Returns to Baccalaureate Degrees: Corrections." *Review of Higher Education*; V18, N4; pp. 83-89. ERIC EJ 508595.

Guilford, Roxanna. (May 28, 1999). *Universities Support Urban Core Development. Local Universities Partner With Region.* URL <http://dayton.bcentral.com/dayton/stories/1999/05/31/focus3.html> accessed April 17, 2001.

Head, Ronald B. (1994). *The Economic Impact of Piedmont Virginia Community College Upon Its Service Region.* ERIC ED 368437.

Hill, Kent. (December 1999). *The Economic Impact of Arizona State University.* URL <http://www.cob.asu.edu/seid/cbr/impact> accessed April 10, 2001.

Hogan, Timothy D. (1992). "New CBR Study Reveals Economic Impact of ASU." *Arizona Business*, V39, N5; pp. 1-3.

Hogan, Timothy D. (1999). "1999 Tostitos Fiesta Bowl Had Impact of $133 Million." *Arizona Business*, V46, N6; pp. 6-7.

Hopkins, Margaret. (January 3, 2001). "State College, Pa., Tourism Dollars Are Up, Study Shows." *Centre Daily Times*. OCLC FirstSearch full text electronic copy accessed March 21, 2001.

Hudson, Ian. (2001). "The Use and Misuse of Economic Impact Analysis: The Case of Professional Sports." *Journal of Sport and Social Issues*, V25, N1; pp. 20-39.

Human Capital Research Corporation. (1997). *The Impact of Higher Education on Connecticut's Economy, Workforce, Quality of Life, and Future.* ERIC ED 417631.

The Impact of Independent Colleges and Universities of Florida on the State Economy: Fiscal Year 1994-95. (1996). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 96-16.

The Impact of Nova Southeastern University on the South Florida Economy. (1995). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 95-03.

Institute for Higher Education Policy. (1998). *Reaping the Benefits: Defining the Public and Private Value of Going to College. The New Millennium Project on Higher Education Costs, Pricing, and Productivity*. ERIC ED 420256.

Jafri, S. Hussain Ali, Jay D. Dudley, and David Buland. *Economic Impact of Tarleton State University-Stephenville: A Summary*. URL <http://www.tarleton.edu/main/executive summary.html> accessed April 16, 2001.

James Madison University. *The Economic Impact of James Madison University on the Harrisonburg/Rockingham County Area and the Commonwealth of Virginia*. URL <http://www.jmu.edu/instresrch/resrchstud/economic/econimpt.htm> accessed April 17, 2001.

Johnson, Troy. (1994). *Estimating the Economic Impact of a College or University on a Nonlocal Economy*. ERIC ED 375714.

Johnson County Community College. (1985). *The Economic Impact of the Kansas Community Colleges on the Counties and State of Kansas, Fiscal 1983-84*. ERIC ED 262845.

Kansas City Regional Council for Higher Education. (1991). *The Economic Impact of Higher Education on the Kansas City Metropolitan Area 1988-1989*. ERIC ED 342286.

Leslie, Larry L., and Paul T. Brinkman. (1993). *The Economic Value of Higher Education*. Phoenix, Arizona: The Oryx Press.

Lewis, W. Cris. (1996). "Retirement Wealth, Income, and Decision Making in Higher Education." *Journal of Higher Education*, V67, N1; pp. 85-102. ERIC EJ 520099.

Lillibridge, Fred. (1995). *Using a Simple Economic Impact Model to Document Value to Policy Makers*. ERIC ED 385299.

Link, Albert N. (February 2000). "Assessing the Economic Impacts of University R&D and Identifying Roles for Technology Transfer Officers." *Industry and Higher Education*, V14, N1; pp. 24-32. ERIC EJ 602876.

Linthicum, Dorothy S. (1978). *Economic Impact Manual for Maryland Community Colleges.* ERIC ED 160167.

May, Lucy. (June 12, 1999). *Colleges Calculate Economic Impact. Locally, It's $1.3 Billion, Consortium Study Says.* URL <http://enquirer.com/editions/1999/06/12/loc_colleges_calculate.html> accessed April 10, 2001.

McCarthy, Rebecca. (August 7, 2000). "Returning Students Bring Cash Infusion to Downtown Athens Businesses." *The Atlanta Journal-Constitution*; p. C 2.

Moore, George R. (1975). *The Economic Impact of Chemeketa Community College on the Local Economy.* ERIC ED 134261.

Moore, Kathryn M., and Marilyn J. Amey. (1993). *Making Sense of the Dollars: The Costs and Uses of Faculty Compensation.* ERIC ED 368256.

Morrell, Louis R. (1995). "Measuring Economic Impact: A Plan for Institutional Self-Defense from Taxation." *NACUBO Business Officer*, V29, N1; pp.43-46. ERIC EJ 510280.

National Association of State Universities and Land-Grant Colleges. (1997). *Value Added: The Economic Impact of Public Universities.* ERIC ED 416 778.

Nova Southeastern University Fact Book. (1995). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 95-02.

Nova Southeastern University Fact Book. (2001). Fort Lauderdale, Florida: Nova Southeastern University. Research and Planning Report 01-01.

The NSU Library, Research and Information Technology Center. URL <http://www.nova.edu/library/lritc/faq2.html> accessed May 14, 2001.

Olson, Lawrence. (1981). *The Economic Impact of Independent Colleges and Universities on Massachusetts in 1979-80 and 1980-81.* ERIC ED 217776.

Orlowski, M. A. (1992). Economic Impact Study, 1992. ERIC ED 353012.

Packwood, Gene. (1982). *The Impact of Community Colleges on Michigan and Its Economy: Preliminary Technical Report.* ERIC ED 226772.

Palmer, Diane H. (1978). *Elements of an Economic Impact Study (Or Building on the ACE Model).* ERIC ED 161353.

Posey, Ellen I. (1983). *Georgia State University Spending Patterns and the Atlanta Economy, 1983.* ERIC ED 234712.

Rajek, Becky. (1997). *Designing and Implementing Value Focused Effectiveness Indicators.* ERIC ED 409957.

Rodin, Judith, and John Fry. (November 2, 1999). *Penn and the Region: An Economic Impact Study.* URL <http://www.upenn.edu/almanac/v46/n10/econ-study.html> accessed May 16, 2001.

Rubi, David C. (1995). *The State's Return on Investment in the Arizona Community Colleges. Institutional Effectiveness Series: Return on Investment Measure, May 1995.* ERIC ED 382261.

Ryan, Gordon Jeremiah. (1983). *The Direct Economic Impact of New Jersey's Community Colleges.* ERIC ED 233774.

Salley, Charles D. (1976). *A Review of Economic Multipliers for Post-Secondary Institutions with Selected Models Applied to Georgia State University.* ERIC ED 135320.

Sanchez, Jorge R., and Frankie S. Laanan. (editors). (1998). *Determining the Economic Benefits of Attending Community College.* ERIC ED 425773.

Selgas, James W. (1973). *The Impact of the College on the Local Economy.* ERIC ED 072779.

Simmons, F. Bruce, III. (1992). *The University of Akron and Its Economic Impact on Its Community.* ERIC ED 355854.

Smith, Edwin R., and Kathleen K. Bissonnette. (1986). *A Comparative Analysis of the Economic Benefits of Nonresident Students.* ERIC ED 280402.

State University of New York. (1982). *The Economic Impact of SUNY Community Colleges.* ERIC ED 223283.

State University of New York. (1995). *The Economic Impact of the State University of New York on the State of New York.* ERIC ED 398776.

Stokes, Kevin, and Paul Coomes. (1996). The Local Impact of Higher Education. ERIC ED 397738.

Stout, Robert J. (1996). *Community Attitudes about Economic Impacts of Colleges: A Case Study.* ERIC ED 397737.

Stout, Robert J. (1997). *The Effectiveness of Economic Impact Studies by Liberal Arts Colleges: A Case Study.* ERIC ED 415798.

Sturm, Pamela S. (1996). *The Impact of West Virginia State College on the Kanawha Valley: A Case Study of the Benefits of Higher Education.* ERIC ED 405769.

Taylor, Peter. (Spring 1990). "The Impact of Institutions of Higher Education on Local Income and Employment: The Case of Bristol Polytechnic." *Higher Education Review*, V22, N2; pp. 39-58. ERIC EJ 411949.

Trubac, Edward. (1975). *Economic Impact. Study of Independent Higher Education in Indiana.* ERIC ED 261586.

United States Census Bureau. *Historical Income Tables - People - Table P-16. Educational Attainment--People 25 Years Old and Over by Median Income and Sex: 1991 to 1999.* URL <http://www.census.gov/hhes/income/histinc/p16.html> accessed May 15, 2001.

United States Census Bureau. *Census 2000 - PHC-T-2. Ranking Tables for States: 1990 and 2000.* URL <http://www.census.gov/population/cen2000/phc-t2/tab01.txt> accessed May 14, 2001.

University of Nebraska. (1999). *How to Make One Dollar into Nine. NU-Commissioned Study Notes University's Economic Impact.* URL <http://www.unl.edu/scarlet/v9n21features.html> accessed April 17, 2001.

University of South Carolina. (June 2000). *The Economic Impact of The University of South Carolina System.* URL <http://http://www.sc.edu/USCimpact/> accessed April 16, 2001.

Van Meter, Donald S. (July 1995). "Blue Chip Investments: Assessing Higher Education's Contributions to Economic Vitality." *Business Officer*, V29, N1; pp. 47-50.

Vermont State Commission on Higher Education. (1979). *The Economic Importance of Higher Education in Vermont.* ERIC ED 172592.

Weil, Dan. (February 20, 2001). "Sports are Big Ticket for Tourism." The Palm Beach Post; p. 6B.

Weiss, Joanna. (September 27, 1999). Harvard Touts Its $2B Impact on Economy. Institution, Long at Odds with City, Outlines Its Contributions to Boston." *Boston Globe*; p. B1.

Weitzman, Scott M. (1991). *The Economic Impact of the Community College System on the State of Florida.* ERIC ED 336145.

Wellsfry, Norval L. (1976). *The Economic Impact of the Virginia Community College System from 1966 to 1974.* ERIC ED 241098.

What is F.E.T.P.I.P.? URL <http://www2.myflorida.com/awi/pdg/quickquestions/fetpip/whatis.htm> accessed May 16, 2001.

Where'$ George™. URL <http://www.wheresgeorge.com/> accessed May 1, 2001.

Table 1

Summary of all Contributions[1] to Nova Southeastern University's Economic Impact on South Florida and Florida for Fiscal Year 2000 (07/01/99 to 06/30/00)

Source	Geographic Area	
	South Florida	Florida
Measured Contributions		
Salary Expenditures	$110,284,200	$117,704,600
Non-Salary Expenditures	$37,536,700	$53,927,600
Contract Services	$4,404,700	$4,404,700
Subtotal	$152,225,600	$176,036,900
Estimated Contributions		
Cost-of-Living Expenses for Students with Temporary Residence in South Florida	$57,382,900	$57,382,900
Cost-of-Living Expenses for Residents Who Only Remain Because of Attendance at the University	$15,734,300	$40,714,400
Expenses for Students, Guests, and Others for Lodging in South Florida Hotels	$7,050,200	$7,050,200
Subtotal	$80,167,400	$105,147,500
Sum	$232,393,000	$281,184,400
Multiplier	2.00	2.60
TOTAL	$464,786,000	$731,079,400

[1] Data are rounded to $100.

Data Resources and Assumptions

Geographic Area

South Florida includes Broward County, Miami-Dade County, and Palm Beach County. Florida includes all 67 counties.

Salary Expenditures

Data are from the University's Office of Human Resources and Payroll. *Zip code* and *State* identifiers were used to report statistics for South Florida and Florida.

Non-Salary Expenditures

Data are from the University's Office of Information Technology. *Zip code* and *State* identifiers were used to report statistics for South Florida and Florida.

Contract Services

Although this category represents money sent to a company out-of-Florida, it largely describes wages paid to campus-based contract employees. As such, it is assumed that most money in this category is spent in South Florida, which of course also represents money spent in Florida.

Cost-of-Living Expenses for Students with Temporary Residence in South Florida

This category is used to calculate the economic impact for South Florida from out-of-area students with temporary residence in South Florida. These students reside in South Florida and pay rent, purchase food and gasoline, etc. All parts of these purchases benefit the South Florida economy.

Zip code and *State* identifiers were used to identify students who attend class in South Florida, but have an out-of-area permanent residence (N = 4,282 students).

When this category was reported in Research and Planning Report 95-03, the CY 1994 base was $10,000 for annual cost-of-living expenses. That CY 1994 base has been adjusted for 5 percent annual inflation and by CY 2000 the annual cost-of-living base is $13,401.

Cost-of-Living Expenses for Residents Who Only Remain Because of Attendance at the University

This category is used to calculate the economic impact for South Florida and Florida from resident students who only remain in either South Florida or Florida because of attendance at the University. In terms of economic impact, these students are treated as if they are out-of-area students, because prior survey responses to the query *What would you have done if you had not attended NSU?* resulted in the following observations:

- Approximately 9 percent of all South Florida residents who responded to this question indicated that they would leave South Florida, but not Florida.

- Approximately 22 percent of all South Florida residents who responded to this question indicated that they would leave Florida.

Data on intent to remain or leave South Florida and/or Florida is based on the results of a Fall Term 1999 survey administered by academic center contacts throughout the University, under the direction of Research and Planning. The survey distribution process was broad-based, included all academic centers, and the responding sample was judged representative of the University (*Fall Term 1999 Nova Southeastern University Students Respond to a Broad-Based Satisfaction Survey*; Research and Planning Report 00-09, May 2000; *Fall Term 1999 Nova Southeastern University Students Respond to a Broad-Based Satisfaction Survey: Breakouts by Student Service Center Locations*; Research and Planning Report 00-26, December 2000; *Fall Term 1999 Nova Southeastern University Students Respond to a Broad-Based Satisfaction Survey: A Comparison of Campus-Based Students And Distance Education Students*; Research and Planning Report 01-03, February 2001; *Fall Term 1999 Nova Southeastern University Students Respond to a Broad-Based Satisfaction Survey: A Comparison of Students by Age ($\leq$ 25 Years and $\geq$ 26 Years)*; Research and Planning Report 01-06, April 2001).

Like their South Florida-based out-of-area counterparts, these resident students are currently only in South Florida and Florida because of the University's presence in South Florida. They pay rent, purchase food and gasoline, etc. and all parts of these purchases benefit the South Florida and Florida economy.

Like out-of-area students, the CY 2000 cost of living base $13,401 per year.

Expenses for Students, Guests, and Others for Lodging in South Florida Hotels

This category is used to calculate the economic impact for South Florida from students, graduating students, and guests who require lodging in South Florida hotels during visits to the campus or University-related institutes and special events. Along with lodging, this category includes per diem expenses for food and other expenses. All parts of these purchases benefit the South Florida economy.

A key term for this category is *room night*. Regardless of the number of guests staying overnight in a hotel room, a room night is a term used in the hospitality industry to indicate the rental of one hotel room for one night.

When this category was reported in Research and Planning Report 95-03, Fall Term 1994 enrollment was 14,368 students and the CY 1994 base for this category was 25,952 room nights. That CY 1994 base has been adjusted to reflect a Fall Term 2000 enrollment of 18,587 students, resulting in 33,573 room nights for CY 2000 at $90 per room night. It is further assumed that there are two occupants in each room per room night and that each occupant spends $60 per day for food and all other local expenses.

Table 2.A

Nova Southeastern University Fiscal Year 2000 (07/01/99 to 06/30/00) Salary and Non-Salary Expenditures

State	$ Amount	Percent of Total
Florida	171,632,195	74
Broward County	117,745,376	51
Miami-Dade County	20,535,412	9
Palm Beach County	9,540,150	4
Subtotal South Florida	147,820,938	64
Other Florida Counties	23,811,257	10
Other States		
Alaska	571	< 1
Alabama	862,771	< 1
Arkansas	79,576	< 1
Arizona	2,307,957	1
California	1,262,905	< 1
Colorado	272,596	< 1
Connecticut	166,872	< 1
District of Columbia	546,743	< 1
Delaware	17,410	< 1
Georgia	5,118,271	2
Hawaii	34,689	< 1
Iowa	1,612,315	< 1
Idaho	4,623	< 1
Illinois	6,323,025	3

Indiana	197,616	< 1
Kansas	56,648	< 1
Kentucky	188,618	< 1
Louisiana	152,895	< 1
Massachusetts	5,045,137	2
Maryland	806,451	< 1
Maine	196,064	< 1
Michigan	717,090	< 1
Minnesota	211,312	< 1
Missouri	2,321,505	1
Mississippi	98,023	< 1
Montana	122	< 1
North Carolina	2,777,294	1
North Dakota	776	< 1
Nebraska	7,263	< 1
New Hampshire	61,234	< 1
New Jersey	1,521,108	< 1
New Mexico	69,319	< 1
Nevada	1,023,543	< 1
New York	10,608,565	5
Ohio	1,972,451	< 1
Oklahoma	126,595	< 1
Oregon	116,164	< 1
Pennsylvania	3,753,634	2
Rhode Island	81,291	< 1
South Carolina	555,639	< 1

South Dakota	4,497	< 1
Tennessee	385,737	< 1
Texas	6,852,700	3
Utah	130,254	< 1
Virginia	567,485	< 1
Vermont	81,102	< 1
Washington	163,069	< 1
Wisconsin	238,627	< 1
West Virginia	9,807	< 1
Wyoming	10,518	< 1
Subtotal Other States	59,720,477	26
Territories		
Puerto Rico	81,166	< 1
Virgin Islands	81,645	< 1
Subtotal Territories	162,811	< 1
Total United States	231,515,483	100
International		
Canada	50,156	< 1
Subtotal International	50,156	< 1
Unidentified	136,464	< 1
Subtotal Unidentified	136,464	< 1
Grand Total	231,702,103	

Table 2.B

Nova Southeastern University Fiscal Year 2000 (07/01/99 to 06/30/00) Salary Expenditures

State	$ Amount	Percent of Total
Florida	117,704,631	94
Broward County	90,587,337	72
Miami-Dade County	12,548,137	10
Palm Beach County	7,148,717	6
Subtotal South Florida	110,284,191	88
Other Florida Counties	7,420,440	6
Other States		
Alabama	178,473	< 1
Arkansas	63,450	< 1
Arizona	141,992	< 1
California	291,847	< 1
Colorado	211,687	< 1
Connecticut	67,669	< 1
District of Columbia	35,948	< 1
Delaware	13,767	< 1
Georgia	426,101	< 1
Hawaii	33,879	< 1
Iowa	21,783	< 1
Idaho	3,694	< 1
Illinois	223,920	< 1
Indiana	98,698	< 1

Kansas	11,132	< 1
Kentucky	14,923	< 1
Louisiana	49,612	< 1
Massachusetts	200,334	< 1
Maryland	253,116	< 1
Maine	69,235	< 1
Michigan	133,565	< 1
Minnesota	25,760	< 1
Missouri	60,785	< 1
Mississippi	94,198	< 1
North Carolina	412,216	< 1
Nebraska	1,314	< 1
New Hampshire	38,865	< 1
New Jersey	273,633	< 1
New Mexico	53,916	< 1
Nevada	480,070	< 1
New York	621,573	< 1
Ohio	192,802	< 1
Oklahoma	98,995	< 1
Oregon	56,151	< 1
Pennsylvania	536,916	< 1
Rhode Island	68,703	< 1
South Carolina	441,326	< 1
Tennessee	220,637	< 1
Texas	340,584	< 1
Utah	26,942	< 1

Virginia	298,225	< 1
Vermont	31,221	< 1
Washington	52,566	< 1
Wisconsin	100,327	< 1
West Virginia	9,022	< 1
Wyoming	10,200	< 1
Subtotal Other States	7,091,766	6
Territories		
Puerto Rico	66,077	< 1
Virgin Islands	81,620	< 1
Subtotal Territories	147,696	< 1
Total United States	124,944,093	100
International		
Canada	39,830	< 1
Subtotal International	39,830	< 1
Grand Total	124,983,923	

Table 2.C

Nova Southeastern University Fiscal Year 2000 (07/01/99 to 06/30/00) Non-Salary Expenditures

State	$ Amount	Percent of Total
Florida	53,927,564	51
Broward County	27,158,039	25
Miami-Dade County	7,987,275	7
Palm Beach County	2,391,433	2
Subtotal South Florida	37,536,747	35
Other Florida Counties	16,390,817	15
Other States		
Alaska	571	< 1
Alabama	684,298	< 1
Arkansas	16,126	< 1
Arizona	2,165,965	2
California	971,058	< 1
Colorado	60,909	< 1
Connecticut	99,203	< 1
District of Columbia	510,795	< 1
Delaware	3,643	< 1
Georgia	4,692,170	4
Hawaii	810	< 1
Iowa	1,590,532	1
Idaho	929	< 1
Illinois	6,099,105	6

Indiana	98,918	< 1
Kansas	45,516	< 1
Kentucky	173,695	< 1
Louisiana	103,283	< 1
Massachusetts	4,844,803	5
Maryland	553,335	< 1
Maine	126,829	< 1
Michigan	583,525	< 1
Minnesota	185,552	< 1
Missouri	2,260,720	2
Mississippi	3,825	< 1
Montana	122	< 1
North Carolina	2,365,078	2
North Dakota	776	< 1
Nebraska	5,949	< 1
New Hampshire	22,369	< 1
New Jersey	1,247,475	1
New Mexico	15,403	< 1
Nevada	543,473	< 1
New York	9,986,992	9
Ohio	1,779,649	2
Oklahoma	27,600	< 1
Oregon	60,013	< 1
Pennsylvania	3,216,718	3
Rhode Island	12,588	< 1
South Carolina	114,313	< 1

South Dakota	4,497	< 1
Tennessee	165,100	< 1
Texas	6,512,116	6
Utah	103,312	< 1
Virginia	269,260	< 1
Vermont	49,881	< 1
Washington	110,503	< 1
Wisconsin	138,300	< 1
West Virginia	785	< 1
Wyoming	318	< 1
Subtotal Other States	52,628,701	49
Territories		
Puerto Rico	15,089	< 1
Virgin Islands	25	< 1
Subtotal Territories	15,114	< 1
Total United States	106,571,379	100
International		
Canada	10,326	< 1
Subtotal International	10,326	< 1
Unidentified	136,464	<1
Subtotal Unidentified	136,464	< 1
Grand Total	106,718,169	

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